

DETAILED ACTION

1. Claims 1-18 are pending in the current application.
2. The examiner acknowledges the preliminary amendments filed on 7/25/2006.
3. Claims 4-6, and 8-9 have been amended on 7/25/2006.
4. Claims 10-18 have been added on 7/25/2006.

Priority

5. This application claims priority from PCT application number PCT/FR2005/000164, filed on 1/26/2005, which claims priority from French Patent application number 04000815, filed on 1/29/2004.

Drawings

6. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the ball-and-socket joint in claims 4, and 9-11, and the articulations that connect the lateral portions to the headband in claim 8 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended

replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Line 2 of claim 2 reads "the shell has approximately the shape of a shellfish". The accepted definition of "shellfish" is understood to encompass all aquatic invertebrate animals, whose shapes vary significantly. Therefore it is unclear as to an exact shape the shell should be. For the purpose of examination the shape of a

shell that has "approximately the shape of a shellfish" will be treated as any shell like structure.

9. Claims 6, and 15-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 6 and 15-18 recite the limitation "*each-mini loud speaker*" and "*each shell*". The parent claims do not suggest an additional mini loudspeaker and an additional shell. There is insufficient antecedent basis for this limitation in the claim.

Claim Objections

10. Claim 7 is objected to because of its dependency on claim 6. Appropriate correction is required.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

12. Claims 1, 5, 6-8, and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Yang, U.S. Patent No. 6,772,853, filed on 1/15/2003 (hereby Yang).

13. As to claim 1, Yang discloses an audio headphone (Fig. 3), comprising a headband (5) embodied to surround the head of a user and at least one sound emitter unit (3) arranged to face an ear, wherein each sound emitter unit (3) comprises a mini-loud speaker (34) and a shell (36). The shell (36) is concave on one face; the unit is embodied such that said mini-loud speaker is arranged in front of the ear, without making contact therewith, when the headphone (Fig. 3) is worn and placed such as to broadcast the sound therefrom in the direction of the auricle of the ear, and such that said shell (36) is fixed to said mini-loud speaker (34), when placed along the auricle of the ear with the concave region thereof facing said auricle.

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5. As to claim 5, Yang discloses that the headband (5) includes a central part embodied to surround the head of a user by exerting a light pressure on the cranium, and two lateral portions (1) bent like a glasses side-piece's tip, these lateral portions (1) being shaped to find a stable rest on the mastoid bone, when said mini-loud speaker (34) and said shell (36) are properly positioned near the ears.

14. As to claims 6-8, and 18, Yang discloses that each mini-loud speaker (34) and each shell (36) is carried by a side-piece, which is shown in Fig. 5 connected to the sound emitter unit (3) by connecting member (51), and the side piece is connected via joints to the headband (5), just below where element (5) is indicated, and therefore is moveable with respect to the headband (5). The headband shown in Fig (5) is connected to the lateral portions (1) by joints shown above the connecting members (51), the joint corresponding to articulations enabling to tip the central part of the headband (5) against the lateral portion (1).

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

16. Claims 2-3, 12 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yang, U.S. Patent No. 6,772,853, filed on 1/15/2003 (hereby Yang) as applied to claims 1, 2, and 3 above.

17. As to claim 2, Yang discloses that the shell (36) has approximately the shape of a shellfish. The shell (36) is concave, and round, having the approximate shape of a shellfish.

18. As to claim 3, Yang discloses that the shell (36) has approximately the shape of a shellfish. The shell (36) is concave, and round, having the approximate shape of a mussel.

19. As to claim 12, Yang discloses that the headband (5) includes a central part embodied to surround the head of a user by exerting a light pressure on the cranium, and two lateral portions (1) bent like a glasses side-piece's tip, these lateral portions (1) being shaped to find a stable rest on the mastoid bone, when said mini-loud speaker (34) and said shell (36) are properly positioned near the ears.

20. As to claim 15, Yang discloses that each mini-loud speaker (34) and each shell (36) is carried by a side-piece, which is shown in Fig. 5 connected to the sound emmitter unit (3) by connecting member (51), and the side piece is connected via joints to the headband, just below where element (5) is indicated.

21. Claims 4, 9-11, 13-14, and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yang, U.S. Patent No. 6,772,853, filed on 1/15/2003 (hereby Yang) as applied to claims 1, 2, and 3 above, in view of Andre et al., U.S. Patent No. 4,965,836, published on 10/23/1990 (hereby Andre).

22. As to claims 4 and 9-11, Yang does not specifically disclose that each shell connector on the sound emitter unit is mounted on a ball and socket joint, although Yang does disclose that the sound emitter unit (3) is mounted on a ring shaped groove joint (22). However, the use of a ball and socket joint to mount a sound emitter unit in a pair of headphones is well known in the art.

Andre teaches a pair of headphones, wherein the sound emitter unit (28) is mounted on a ball (50) and socket joint (52). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the ball and socket joint as taught by Andre into the headphones of Yang, specifically into the connector (Andre: Fig. 5, element 51) for the added benefit of allowing the sound emitter unit to move in multiple axes (Andre: Col 1, lines 64-66).

23. As to claims 13-14, Yang discloses that the headband (5) includes a central part embodied to surround the head of a user by exerting a light pressure on the cranium, and two lateral portions (1) bent like a glasses side-piece's tip, these lateral portions (1)

being shaped to find a stable rest on the mastoid bone, when said mini-loud speaker (34) and said shell (36) are properly positioned near the ears.

24. As to claims 16-17, Yang discloses that each mini-loud speaker (34) and each shell (36) is carried by a side-piece, which is shown in Fig. 5 connected to the sound emmitter unit (3) by connecting member (51), and the side piece is connected via joints to the headband (5), just below where element (5) is indicated.

Conclusion

The prior art made of record

a.	US Patent Number	6,772,853
b.	US Patent Number	4,965,836

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan C. Robinson whose telephone number is (571) 270-3956. The examiner can normally be reached on Monday through Friday from 9 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Suhan Ni, can be reached on (571) 272-7505. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

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published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ryan Robinson

/Suhan Ni/
Primary Examiner, Art Unit 2615